

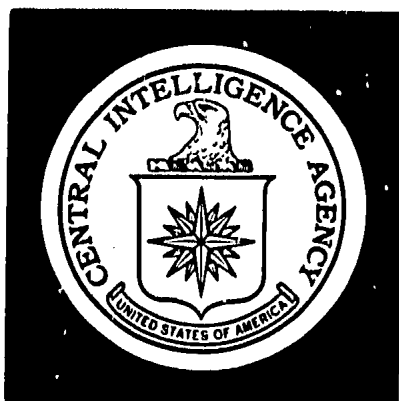
Declassified in Part - 25X1  
Sanitized Copy Approved for  
Release 2011/10/31 :  
CIA-RDP85T00875R00160003

Declassified in Part -  
Sanitized Copy Approved for  
Release 2011/10/31 :  
CIA-RDP85T00875R00160003

*CIA/DER/IM 70-17*

~~Confidential~~

*Doc/Sec*



DIRECTORATE OF  
INTELLIGENCE

# Intelligence Memorandum

*The Shchekino Experiment:*

*A New Attack On An Old Soviet Labor Problem*

~~Confidential~~

ER IM 70-17  
February 1970

Copy No. 29

## WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the US Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

GROUP 1 Excluded from automatic downgrading and declassification
---

## CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY  
Directorate of Intelligence  
February 1970

### INTELLIGENCE MEMORANDUM

The Shchekino Experiment:  
A New Attack On An Old Soviet Labor Problem

#### Introduction

Increasing concern about labor shortages and inefficient use of the work force has caused the USSR to experiment with new measures designed to increase output while using fewer workers. The program gaining the most attention is the so-called "Shchekino experiment," named after the chemical combine where the experiment was first introduced two years ago. The purposes of this memorandum are (a) to discuss briefly the labor conditions leading to the experiment, (b) to describe the experiment at Shchekino and evaluate its results, and (c) to discuss the likely results if there is nationwide adoption of the experiment.

#### Background

1. Since 1966, there have been frequent reports in the Soviet press concerning a nationwide labor shortage and the failure to meet manpower plans. After overfulfilling plans for additions to the work force in state enterprises annually since 1950, there was a 700,000-man, or 23%, shortfall in the planned goal for 1967. Shortfalls continued in 1968-69 and

Note: This memorandum was produced solely by CIA.  
It was prepared by the Office of Economic Research.

CONFIDENTIAL

## CONFIDENTIAL

led to downward revisions in the employment goals for the current five-year plan (1966-70). Soviet economists trace the cause of the current shortage of labor to the increasing demand for labor, particularly in the labor-intensive service sector, which is currently undergoing rapid expansion.

2. The failure of labor productivity in industry, construction, and agriculture to attain rates of growth prescribed in the five-year plan also has contributed to the acuteness of the manpower shortage. Unable to meet output-per-worker targets, enterprise managers have sought to increase their work forces in order to attain goals for total output.

3. In urban areas the growing tightness of the labor market has been accompanied by a decline in the flow of new workers from traditional sources. In the past, migration of farm workers to cities supplied several hundred thousand workers annually to the urban labor force, but now this movement has virtually halted, [REDACTED] Moreover, opportunities to increase the number of workers by raising the participation rate of housewives have been largely exhausted. Currently, more than 90% of the people of working age (males 16 to 59 years of age, females 16 to 54) either have jobs or are attending school on a full-time basis. Thus recent growth of the urban labor force has been largely dependent on the rate of growth of the able-bodied population. This situation is not expected to change in the foreseeable future.

25X1

4. The increasingly tight labor market situation has brought to the fore the problem of effecting labor savings through a more efficient use of labor. Western visitors have noted that, in general, several times as many workers are used in Soviet plants as in comparable Western plants. The manager of a Soviet enterprise has always tended to hoard labor because his success is determined largely by his ability to meet output goals, irrespective of costs. This tendency is fortified by uncertainties in the industrial supply system. For example, late delivery of materials may lead a manager to use extra shifts of workers in an attempt to meet output goals in the

CONFIDENTIAL

## CONFIDENTIAL

prescribed time period. Moreover, the legal prohibition against firing workers except under limited, specified conditions may reduce any tendency of management to fire redundant workers.

5. The economic reform initiated in 1965 contained provisions that were designed to encourage the efficient use of labor. Enterprise managers were given -- in theory -- full autonomy in setting the size of the work force, in hiring and firing workers, and in determining wage levels (subject to the limits imposed by the size of the enterprise's annual wage fund). In practice, however, the autonomy of enterprise managers has been constrained both by inconsistent provisions of the reform dealing with incentives and by direct pressure from above.

6. Thus on the one hand the enterprise manager was granted greater autonomy to spur efficiency, but on the other hand the manager's bonus was tied to the size of the wage fund. The larger the wage fund (that is, the more workers employed), the larger the potential earnings of the manager.

7. In addition, a variety of direct sanctions and indirect pressure limited the manager's autonomy. For example, management's freedom in the use of labor is still limited by centrally planned lists that prescribe the size of the work force and establish wage rates. Moreover, shortly after the rules of the economic reform were announced, managers were publicly warned not to sack redundant workers. These weaknesses in the reform are recognized and criticized in the press. The Shchekino experiment is an attempt to overcome these inconsistencies in the reform.

### The Shchekino Experiment

8. The Shchekino Chemical Combine, located in Tula Oblast, is one of the largest and most modern chemical facilities in the Soviet Union. The Combine as presently constituted grew out of a decision in 1958 to build a large chemical fertilizer plant, to which have been added facilities for the production of a wide line of other chemicals. Today the output of the Shchekino Combine includes, in addition to fertilizers, caprolactam (an input for synthetic

## CONFIDENTIAL

## CONFIDENTIAL

fibers), urea, ion exchange resins, nitrogen, methanol, and xenon. Moreover, a large component for the production of synthetic fiber is due to be completed in 1970. The first elements at Shchekino were commissioned in 1963 and apparently were accompanied by the usual startup problems which plague Soviet chemical plants. As a result of the gradual overcoming of production difficulties and the commissioning of additional units, output increased rapidly -- twelvefold by 1968. Much of the Combine was designed and equipped by Dutch and Italian firms. Currently, about 6,000 workers are employed at the Combine.

9. In October 1967 an experiment was begun at the Shchekino Chemical Combine whereby one out of every seven workers at the Combine was to be dismissed by 1970 while the total wage fund at the Combine was to remain unchanged at the 1967 level. Under the experiment, when a worker is fired one-half of the wages thus saved is placed at the disposal of the shop foreman. The foreman then has the right to raise the base wages of the remaining workers by up to 30% for taking up the heavier workload per worker caused by the dismissal. The other half of the wage savings created by the dismissal is turned over to the combine director to be divided among the technical and administrative staffs. Here again, no base salary may be raised by more than 30%. Advocates of the experiment claim that the rewards offered are sufficient to overcome reluctance on the part of workers to assume greater workloads and also sufficient to ensure that management will seek to eliminate unneeded workers.

10. All rules governing enterprises operating under the 1965 economic reform remain in effect under the experiment except those provisions governing labor. Labor provisions of the reform have been modified at Shchekino as follows:

- (a) Managerial remuneration is no longer tied to the size of the wage fund, and managers share directly in any wage savings resulting from cuts in the size of the staff;

## CONFIDENTIAL

## CONFIDENTIAL

- (b) Establishment lists, whereby central authorities give detailed instructions on the number of workers and the work-loads, are eliminated;
- (c) Detailed basic wage rates are eliminated, although an upper limit on increases remains;
- (d) Labor laws generally prohibiting the firing of workers and the requirement for trade union approval of all dismissals have been waived.

11. At first blush, the results reported from Shchekino seem to indicate that the experiment is a spectacular success. During 1968-69, some 900 workers were fired, output increased by 58%, labor productivity rose by 69%, and average wages increased by 24%. A closer look at the data, however, leads to a more restrained assessment of the experiment. Surprisingly, the data indicate that output and productivity had grown much faster at the Combine before 1967, when the experiment was introduced; average wages before the experiment, however, had risen only about one-third as fast as in 1968-69. Presumably, Shchekino enjoyed nonrecurring benefits during its first year of working under the economic reform and was unable to maintain this tempo subsequently.

12. The situation at Shchekino was particularly well suited for the experiment. Shchekino is a highly capital-intensive operation; production is only very loosely related to the size of the work force. Most workers at the Combine are engaged in maintenance, repair, and laboratory work. By eliminating certain laboratory and maintenance personnel, the Combine was able to carry out the experiment without great risk to production. It is not clear, however, that efficiency has actually improved. For example, if elimination of laboratory operations means that these functions must now be performed by another organization, the overall efficiency of the Soviet economy may not have been improved. Finally, the experiment has been facilitated by the nearby startup of a new chemical plant that provides employment opportunities for

CONFIDENTIAL



## CONFIDENTIAL

workers fired by Shchekino. Nevertheless, *Pravda* cautioned that, "One should not suppose that the experiment is proceeding smoothly, without a hitch .... Considerable problems arose from the relocation of workers."

13. In 1968, one year after the experiment began at Shchekino, other plants began to use the Shchekino procedures. By mid-1969, approximately 25 plants had been transferred to the experiment and a total of 22,000 workers were scheduled to be fired by 1971. Two plants on the experiment, however, were planning to expand their work forces. The remaining plants -- mostly in the chemical and petroleum industries -- planned to cut employment from 1% to 15%. Yet an article in a Soviet journal complained that at a group of Western-designed and -equipped chemical enterprises, including Shchekino, several times as many workers were employed as in comparable Western plants. For example, employment at the Soviet enterprises exceeded employment at similar Western plants by eight times for auxiliary workers, by three and one-half times for technicians and administrators, and by 55% for basic production workers. Moreover, employment for each category exceeded the limits imposed by Soviet planners. Several factors appear to account for the vastly greater use of labor in the Soviet enterprises. First, storing and transporting jobs, automated at Western plants, are still done largely by hand at Soviet chemical plants. Second, even at jobs identical to those in the West, the Soviets tend to use more workers. Third, despite the planned limits on employment, Soviet managers are successful in stockpiling redundant workers. In light of this, the accomplishments of the experiment seem modest indeed.

14. Newspaper and journal articles have attempted to convey the impression that the experiment was self-initiated at the enterprise level and that it has been embraced enthusiastically by workers and managers. In truth the experiment has been directed from the ministerial level. At Shchekino, for example, the experiment was initiated after the Director of the Combine had requested an additional 400 workers. The Ministry of the Chemical Industry responded with the scheme to fire 1,000 workers, to maintain the

CONFIDENTIAL

## CONFIDENTIAL

existing wage fund, and to boost production and productivity. The reaction of managers and workers indicates substantial resistance.

15. Aversion to the experiment by enterprise managers is suggested by the following statement that appeared recently in the Soviet press:

The question is asked: what if the enterprise underestimates its labor reserves? It is expected that they will promise less than they are capable of.... It is in the interest of the enterprise materially, but they have to be pressured for their own good to commit themselves and to take the bait.

This indication of managerial reluctance to enter wholeheartedly into an efficiency drive reveals a crippling flaw in the experiment. Because the experiment fails to eliminate fulfillment of the output plan as the overriding success criterion, managers continue to seek a reserve of workers, even at the expense of bonuses.

16. Despite euphemistic reports stressing that fired workers were not turned out onto the street but instead offered jobs at other plants, it is clear that the experiment has also met with resistance from workers.

Another article reported worker attitude toward the experiment as, "What is this? My comrade is fired, but I get higher earnings?" Some fired workers have gone to court, seeking to get their jobs back. These workers argued that their dismissals violate provisions in the labor code that sharply restrict the right of managers to fire workers. To date, the courts have upheld the managers.

17. Finally, several recent articles that "set the record straight" indicate that the experiment also has run into some criticism from conservative economists who fear that the loss of centralized control over the size and remuneration of enterprise work forces will lead to chaos. Actually, no significant control function is being surrendered under the experiment.

CONFIDENTIAL

25X1

25X1

25X1

## CONFIDENTIAL

18. Whatever the foot-dragging, the announcements of an increasing number of enterprises transferring to the experiment and a spate of recent laudatory articles suggest that the experiment is picking up steam. But gains in efficiency will be limited even if there is nationwide adoption of the experiment. There will still be a constant temptation for Soviet managers to retain labor reserves. Indeed, Soviet managers, anticipating future manpower cuts as a result of the Shchekino experiment, may increase their efforts to add to current reserves. Increased efficiency, therefore, will be largely the result of fiat on manpower reduction handed down by the ministries. Some additional gains in efficiency, however, may result from improved performance by workers who no longer feel immune from dismissal.

19. Widespread application of the experiment will increasingly raise problems in manpower allocation. The Soviet labor market functions imperfectly at best: there is no coordinated system to match jobs and workers. Large-scale dismissal of workers could create a substantial placement problem, particularly in areas outside the main industrial centers. In such areas job opportunities are more scattered, and excess labor has been reported.

### Conclusions

20. Increasing concern by Soviet authorities over labor shortages and over falling rates of growth of labor productivity led to the formulation of a scheme designed to increase output while using fewer workers. This scheme, known as the "Shchekino experiment," consists of ministries ordering certain enterprises to cut their work forces by specified numbers of workers while meeting higher production targets through improved efficiency. By maintaining enterprise wage funds at the original sizes and dividing the wages saved from dismissed workers among the remaining workers, it is hoped to provide incentives adequate to achieve the desired results.

## CONFIDENTIAL

## CONFIDENTIAL

21. The attempt to provide greater incentives represents an effort to overcome what Soviet authorities believe to be a major shortcoming in the 1965 economic reform: the lack of any inducement for enterprises to operate efficiently. The experiment fails to address an equally serious obstacle to efficiency -- that is, the overriding importance of meeting the output plan. This also leads enterprises to hoard resources. The failure to change this basic success criterion seriously curtails the potential success of the Shchekino experiment in improving efficiency.

22. Pressure for improved efficiency will probably continue to grow in the foreseeable future and, despite evidence of resistance by both managers and workers, the Shchekino experiment probably will be introduced to many more enterprises. Some benefits are likely to accrue -- a reduction of the most flagrant overstaffing and perhaps some improvement in the performance of workers who no longer feel immune from dismissal. But the experiment will not be the panacea some advocates claim. The central factor causing labor reserves remains -- the primacy of the output plan. Until the enterprise manager's main criterion for success is changed to one based on efficiency, the persistent problem of redundant labor will remain.

CONFIDENTIAL